

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: MUN-PYO HONG, ET AL.)
) Group Art Unit: 2812
SERIAL NO.: 10/531,442)
) Examiner:
FILED: March 1, 2006) POMPEY, Ron Everett
)
FOR: THIN FILM TRANSLATOR ARRAY)
PANEL AND A METHOD FOR)
MANUFACTURING THE PANEL)

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

In response to the Final Office Action mailed December 12, 2008, and in conjunction with the Notice of Appeal filed concurrently herewith, the Applicants submit the following remarks in support of the Pre-Appeal Brief Request for Review:

REMARKS

The present submission is responsive to the Final Office Action of December 12, 2008, in which claims 1-4 and 13-15 are presently pending. Claims 1-4 and 13-15 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Kim (U.S. Patent No. 6,624,871, hereinafter “Kim ‘871”) in view of Morozumi (U.S. Patent No. 4,862,237, hereinafter “Morozumi”).

Claim Rejections Under 35 U.S.C. §103

For an obviousness rejection to be proper, the Examiner must meet the burden of establishing a *prima facie* case of obviousness, i.e., that all elements of the invention are disclosed in the prior art; that the prior art relied upon, coupled with knowledge generally available in the art at the time of the invention, contain some suggestion or incentive that would have motivated the skilled artisan to modify a reference or combined references; and that the proposed modification of the prior art had a reasonable expectation of success, determined from the vantage point of the skilled artisan at the time the invention was made. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988); *In Re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970); *Amgen v. Chugai Pharmaceuticals Co.*, 927 U.S.P.Q.2d, 1016, 1023 (Fed. Cir. 1996).

Claims 1-4 and 13-15 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Kim (U.S. Patent No. 6,624,871, hereinafter “Kim ‘871”) in view of Morozumi (U.S. Patent No. 4,862,237, hereinafter “Morozumi”). The Examiner states that Kim ‘871 discloses all of the elements of the abovementioned claims, except for an *insulating substrate*, which the Examiner states is primarily disclosed in col. 6, ln 66-col. 7, ln 4 of Morozumi. Applicants respectfully traverse.

First, it is respectfully noted that the combination of these references was cited in the very first Office action on the merits mailed on February 08, 2007. Applicants have since overcome the combination of these references (with many intervening Office actions and corresponding amendments), and hence respectfully submit that the present rejection using the same references in this Final Office action appears improper.

Nevertheless, the Examiner states on pages 2-3 of the Detailed Action that Kim discloses with respect to FIG. 4A “an etching assistant pattern (39, fig. 4A) made of the same layer as the

semiconductor layer (33, fig. 4A) and located out of an area enclosed (out of the area because the pad area is the section of the semiconductor layer that is at end of the data line outside the pixel area) by the gate lines and the data lines (col. 4, lns. 18-25; fig. 3).”

However, referring to FIG. 3 of Kim, it is seen that the etch stop layer 38 is disposed in an area defined by the intersection of the gate line 31L and data line 35L. More specifically, FIG. 3 of Kim discloses that the etch stop layer 39 covers the gate, source and drain electrodes 35G, 35S and 35D, respectively, located inside the area defined by intersection of the gate line 31L and data line 35L. Moreover, Kim discloses in FIGS. 3, and 4A relied upon by the Examiner, the etch stop layer 39 disposed over and following the path of the data line 35L and disposed over and intersecting the gate line 31L.

Therefore, it is respectfully submitted that neither Kim nor Morozumi, either alone or in combination, teach or suggest, an etching assistant pattern located out of an area defined by intersections of the gate line and the data line, as in claim 1. Thus, independent claim 1, including claims depending therefrom, i.e., claims 2-4 and 13-15, define over Kim in view of Morozumi.

Further, Kim discloses in FIG. 4A relied upon by the Examiner that the etch stop layer 39 is located inside a pixel area defined by intersections of the gate line 31L and the data line 35L, and does not teach or suggest the etching assistant pattern is located outside of a pixel area, as in claim 13. In addition, Kim discloses in FIG. 4A relied upon by the Examiner that the etch stop layer 39 is formed on a passivation layer 36, and does not teach or suggest the etching assistant pattern is formed directly on the gate insulating layer, as in claim 14.

The Examiner introduced Kim ‘871 in the prior Office action to allegedly teach a data wire comprising an upper film of Al or Al alloy as claimed in dependent claim 2. However, the alleged teaching of a data wire comprising an upper film of Al or Al alloy does not cure the defects of Kim ‘871 noted above with respect to independent claim 1. Specifically, neither Kim ‘871 nor Morozumi disclose, teach or suggest: or suggest: **wherein the etching assistant pattern is extended from the semiconductor layer and has a thickness different than a thickness of the semiconductor layer** as claimed in claim 15.

Lastly, Kim discloses in FIG. 4A relied upon by the Examiner that the etch stop layer 39 and the semiconductor layer 33 formed on two different layers, and does not teach or suggest an etching assistant pattern made of the same layer as the semiconductor pattern, as in claim 1.

Specifically, neither Kim '871 nor Morozumi disclose, teach or suggest: or suggest: an etching assistant pattern made of the same layer as the semiconductor layer and located out of an area enclosed by the gate lines and the data lines as claimed in amended independent claim 1.

Therefore, it is respectfully submitted that neither Kim '871 nor Morozumi, either alone or in combination, teach or suggest, an etching assistant pattern having a thickness different than a thickness of the semiconductor layer, as in claim 1. Thus, independent claim 1, including claims depending therefrom, i.e., claims 2-4 and 13-15, define over Kim '871 in view of Morozumi.

Accordingly, it is respectfully requested that the rejection to claims 1-4 and 13-15 under § 103(a) be withdrawn and allow claims 1-4 and 13-15 to issue.

For the above stated reasons, it is respectfully submitted that the final rejection of claims 1-4 and 13-15 is in error and that the same are allowable over the art of record. The fee set forth in 37 CFR 41.20(b)(1) is enclosed herewith. However, if any fees are due with respect to this submission, please charge them to Deposit Account No. 06-1130 maintained by Applicants' attorneys.

Respectfully submitted,

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